

Arsenic Experiment

September 23, 2016

Chloramphenicol resistant
Use RFP as neg control
Nanodrop

Arsenic Experiment for Improving a Part

50 uL of dh5a cells in each tube (3 tubes)

Clone 1

Clone 2

Negative Control of RFP

5 uL of miniprep of each of the above^

Let sit on ice for 30 minutes

Heat shock for 45 second in 42C water bath

Let sit on ice

200 uL LB/tube

Shakubate for 1-2 hours

Plate on Chloramphenicol plates

Overnight in the 37 Incubator

September 29, 2016

Arsenic Experiment

Started 3 liquid cultures of 5 mL LB and 5 uL of CAM

RFP

Clone 1

Clone 2

Overnight in the 37 Incubator

September 30, 2016

Made Stock of LB + NaArO₂

199 mL LB

1 mL NaArO₂

Back-Dilution to make 28 mL , 25 mL for the Experiment and 3 to test OD

Done for C₁, C₂, and RFP

1 mL liquid culture

27 mL LB + NaArO₂

28 uL CAM

546 nm spectrophotometer reading

C₁ OD: 0.220

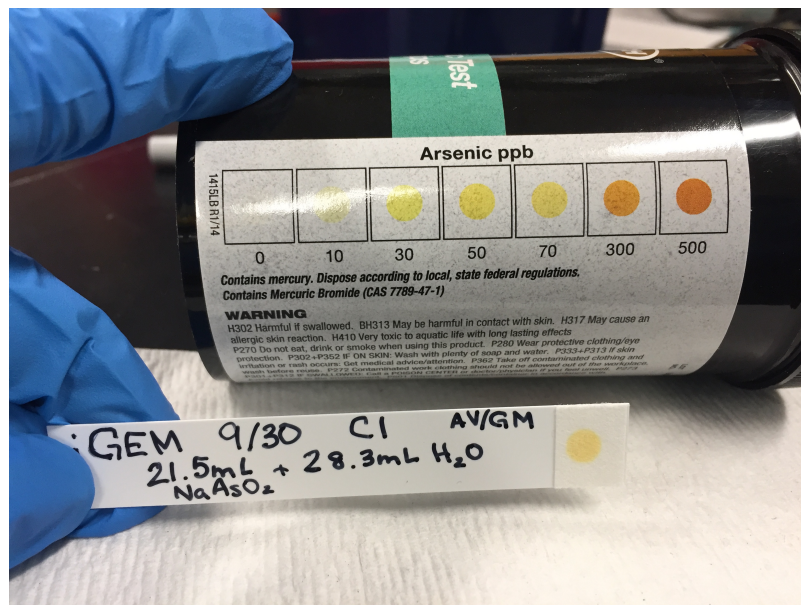
C₂ OD: 0.240

RFP OD: 0.208

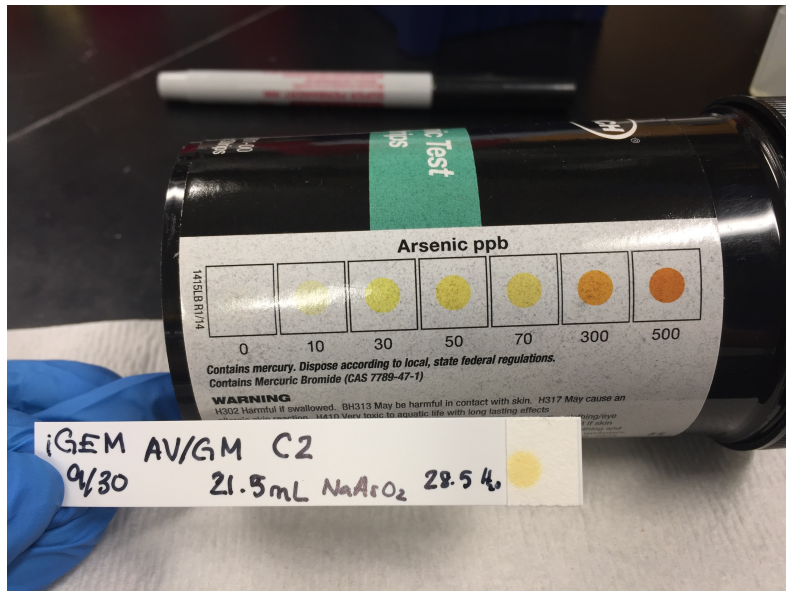
Shakubate for 3-4 hours

Follow Arsenic test protocol

C₁ Result:



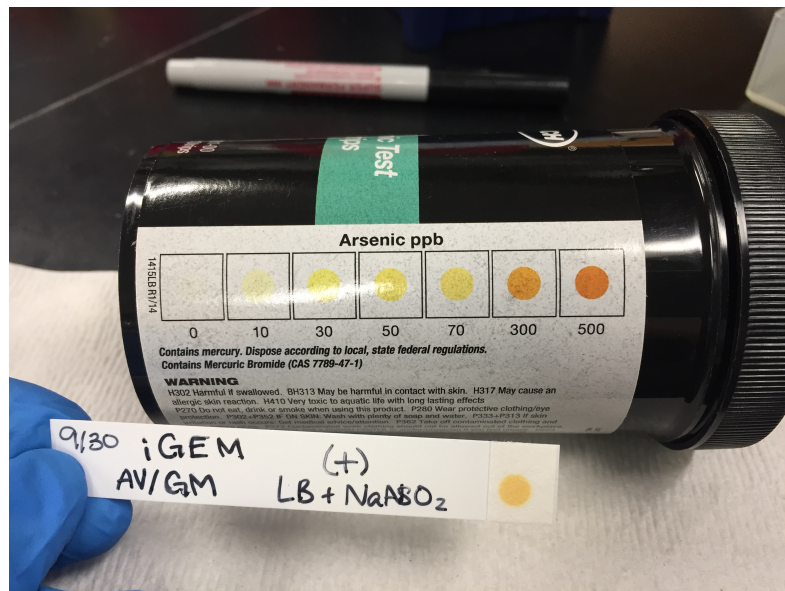
C2 Result:



RFP Result:



50 mL of 0.05 M NaArO_2 in LB (Positive Control for Showing that the Test worked)



October 5, 2016

Arsenic Experiment

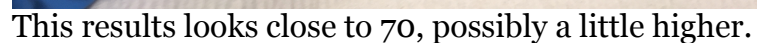
Started 3 liquid cultures of 5 mL LB and 5 uL of CAM

RFP

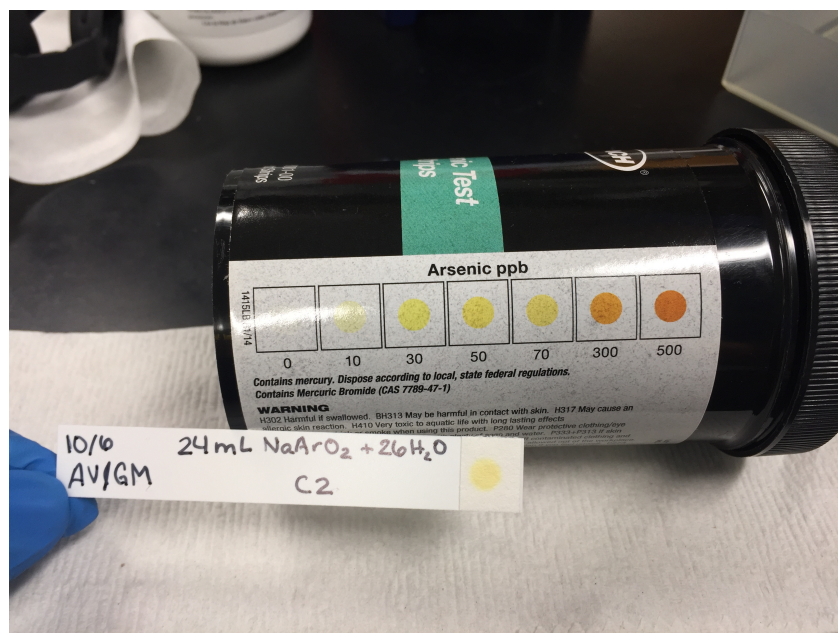
Clone 1

Clone 2

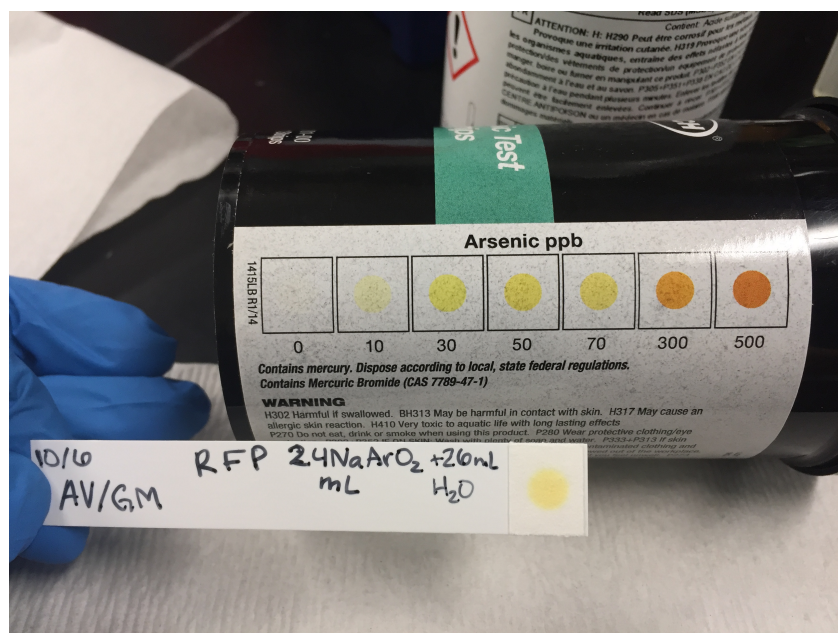
Overnight in the 37 Incubator



C2 Result:



RFP Result:





October 9, 2016

Arsenic Experiment

Started 3 liquid cultures of 5 mL LB and 5 uL of CAM

RFP

Clone 1

Clone 2

Overnight in the 37 Incubator

October 10, 2016

Made Stock of LB + NaArO₂

199 mL LB

1 mL NaArO₂

Back-Dilution to make 28 mL , 25 mL for the Experiment and 3 to test OD

Done for C1, C2, and RFP

1 mL liquid culture

27 mL LB + NaArO₂

28 uL CAM

546 nm spectrophotometer reading

C1 OD: 0.129

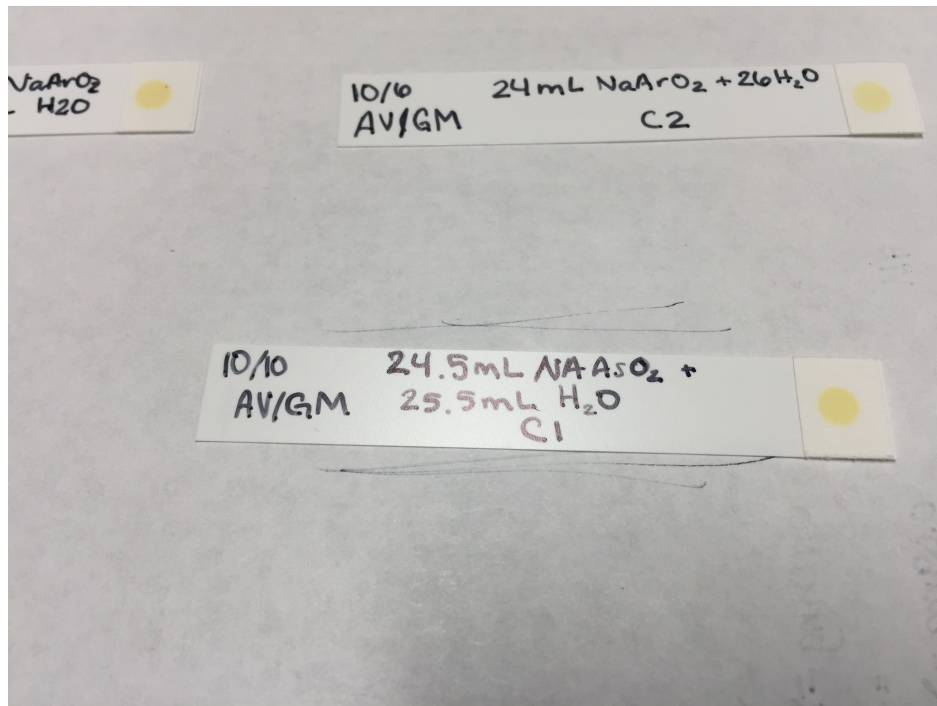
C2 OD: 0.129

RFP OD: 0.161

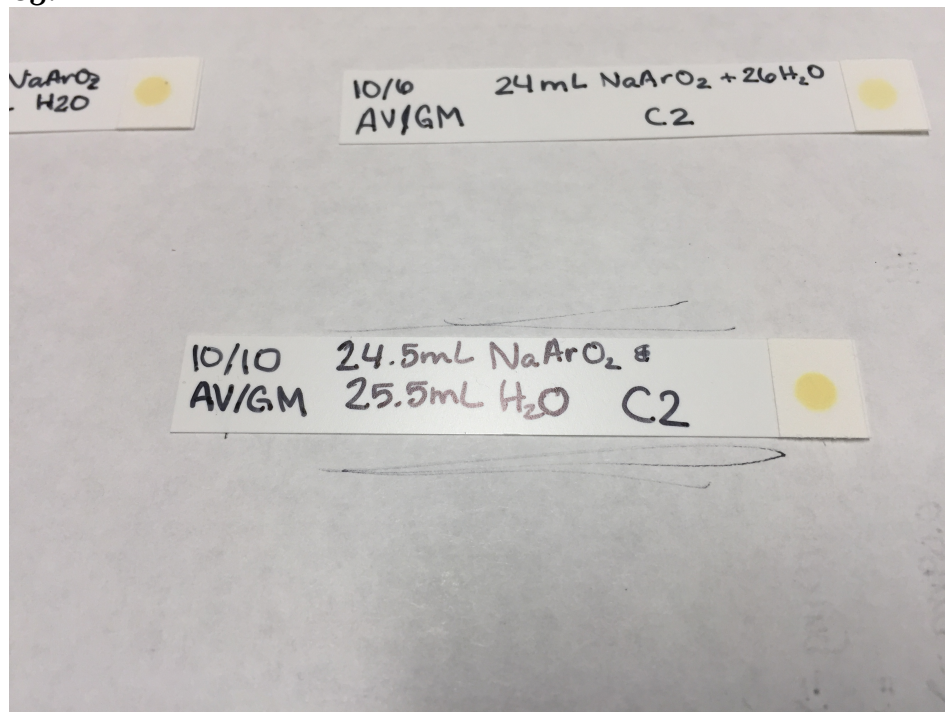
Shakubate for 3-4 hours

Follow Arsenic test protocol

C1:



C3:



RFP:

